

What is claimed is:

1. A vacuum processing apparatus comprising:  
a transfer unit disposed at a center thereof;  
plural processing chambers, each processing chamber having  
a processing table for supporting an object to be processed and  
carrying out processing using a gas; and  
a mass flow controller interposed between two processing  
chambers for supplying gas to the chambers.

2. A vacuum processing apparatus comprising:  
plural processing chambers, each processing chamber having  
a processing table for supporting an object to be processed and  
carrying out processing using a gas in plasma state; and  
a high frequency power source used for turning the gas into  
plasma.

3. A vacuum processing apparatus comprising plural  
processing chambers, each processing chamber having a processing  
table for supporting an object to be processed and carrying out  
processing using a gas, wherein

a connector portion between the vacuum processing apparatus  
and a building in which the apparatus is installed for supplying  
from the building utilities such as gas, water and air to the  
vacuum processing apparatus and discharging exhaust and the like  
from the apparatus is disposed in a line under an entry port  
for transferring the object into vacuum.

4. A vacuum processing apparatus comprising a vacuum processing chamber having a processing table for supporting an object to be processed and carrying out processing using a gas, the vacuum processing chamber having an axisymmetric structure, wherein

the vacuum processing chamber has a double wall structure and comprises a gate valve for sealing an opening through which the object enters the processing chamber.

5. A vacuum processing apparatus comprising a vacuum processing chamber having a processing table for supporting an object to be processed and carrying out processing using a gas, the vacuum processing chamber having an axisymmetric structure with respect to the object to be processed, wherein

the vacuum processing chamber has a double wall structure and comprises a gate valve for sealing an opening formed to the chamber wall through which the object enters the processing chamber; and

the shape of the gate valve for sealing the opening formed to the inner vacuum processing chamber wall is determined so that it does not interfere with the axisymmetric structure of the vacuum processing chamber.

6. A vacuum processing apparatus comprising a vacuum processing chamber having a processing table for supporting an

object to be processed and carrying out processing using a gas, the vacuum processing chamber having an axisymmetric structure with respect to the object to be processed, wherein

the vacuum processing chamber has a double wall structure and comprises a gate valve for sealing an opening formed to the chamber wall through which the object enters the processing chamber; and

an inner vacuum processing chamber has a wall divided into two portions, an upper portion and a lower portion, with the processing table interposed between the two portions.